

REMARKS

Reexamination and reconsideration of claims 20-39 are respectfully requested. The Examiner's acknowledgment of Applicants' Information Disclosure Statement (IDS) is appreciated.

Claims 20-39 were rejected under 35 U.S.C. sec. 112, second paragraph, as being indefinite. Claims 20, 28, and 35 have been amended to remove any indefiniteness that may have existed. Withdrawal of the sec. 112 rejection, second paragraph, of claims 20-39 is respectfully requested.

Claims 20-39 were rejected under 35 U.S.C. sec. 103(a) applying U.S. Pat. No. 5,602,953 ('953) in view of the U.S. Pat. No. 4,707,074 ('074). For patents to be applicable under sec. 103(a), the combination of teachings must, *inter alia*, expressly or inherently, teach, disclose, or suggest each and every feature of the claimed invention. Additionally, motivation and suggestion to combine the patents must be present.

The sec. 103(a) rejection of claims 20-39 is respectfully traversed for the following reasons. The '953 patent requires a cable having a plurality of strands 3 that are connected by cross pieces 17. Each strand includes at least one electrical communication line 5 and at least one optical communication line 9. See the Abstract of the '953 patent. On the other hand, the '074 patent teaches a protective cover having closed channels 6 being bounded by part of the outer wall 5. A region 8 of reduced thickness extends along a channel thereby forming a line of weakness that facilitates opening the cover to access the optical fibers. Additionally, a ripcord 9 can be embedded the wall for ripping the wall. See the Abstract of the '074 patent.

Claim 20 recites a composite cable unit including an optical sub-unit having a tube generally surrounding at least one optical fiber and strength members or filaments that are operative to at least partially de-couple said at least one optical fiber from

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the tube, an electrical sub-unit, and the optical and electrical sub-units being removably connected at a medial portion generally between the sub-units by a common jacket material.

Claim 28 recites a composite cable unit including an optical sub-unit having a tube generally surrounding at least one tight buffered optical fiber and strength members or filaments that are operative to at least partially de-couple said at least one optical fiber from the tube, an electrical sub-unit, and the optical and electrical sub-units being removably connected at a medial portion generally between the sub-units by a common jacket material.

Claim 35 recites a composite cable unit including an optical sub-unit having a tube generally surrounding at least one optical fiber and strength members or filaments that are operative to at least partially de-couple the at least one optical fiber from the tube, an electrical sub-unit being a portion of a coaxial cable, and the optical and electrical sub-units being removably connected at a medial portion generally between the sub-units by a common jacket material.

It is respectfully submitted that the applied art, taken alone or in combination with the other art of record, does not implicitly or expressly teach, disclose, or suggest all of the features of the claims. First, the optical communication line 9 of the '953 patent requires two optical waveguides 11 loosely disposed in a plastic shell 13 without other components therein. See Col. 2, ll. 53-55 of the '953 patent. Second, the closed channels 6 of the '074 patent loosely house one or more optical fibers without other components in the closed channel. See Fig. 1 and Col. 2, ll. 52-56 of the '074 patent. Moreover, no other components are required for the proper operation of either patent configuration.

On the other hand, the claims of the present invention recite, *inter alia*, a tube generally surrounding at least one

optical fiber and strength members or filaments that are operative to at least partially de-couple said at least one optical fiber from the tube. Because the combination of references does not teach each and every feature of the claims, the Office Action failed to make a *prima facie* case of obviousness. For at least these reasons, withdrawal of the sec. 103(a) rejection of claims 20-39 is warranted and is respectfully requested.

Additionally, attached hereto is a proposed Fig. 6 that illustrates the features of at least claim 35. Fig. 6 is required in the present application because claimed features must be depicted in the drawings or cancelled from the claims. No new matter is being added to the present application because basis for claim 35 and Fig. 6 is in the present application on at least page seven.

No fees are believed due in connection with this Reply. If any fees are due in connection with this Reply, please charge any fees, or credit any overpayment, to Deposit Account Number 19-2167.

Allowance of all pending claims is believed to be warranted and is respectfully requested.

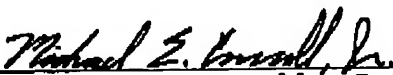
The Examiner is welcomed to telephone the undersigned to discuss the merits of this patent application.

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Respectfully submitted,

JAN 16 2003

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VERSION WITH MARKINGS TO SHOW CHANGES MADEIN THE SPECIFICATION:

The paragraph beginning at page 7, line 9 has been amended as follows:

The present invention has thus been described with reference to the foregoing embodiments, which embodiments are intended to be illustrative of the present inventive concepts rather than limiting. Persons of ordinary skill in the art will appreciate that variations and modifications of the foregoing embodiments can be made without departing from the scope of the appended claims. For example, electrical conductor 16 can be any suitable electrical transmission component, e.g., a co-axial cable (Fig. 6) or a non-twisted conductor. Filaments 14 can be small impregnated fibers or rods surrounding or adjacent to the optical fiber. Any of the composite cable units can be part of a break-out cable. Fan-out or break-out cables of the present invention can include strength filaments adjacent to the cable units. Where wavelength selection features are desired in the optical sub-unit, one or more periodic refractive indices can be written into the fiber before buffering, for example, as disclosed in US-A-4725110, US-A-5620495, US-A-5718738, and/or US-A-5818630, all of which are respectively incorporated by reference herein. For identification purposes, a craftsman may be able to distinguish between the optical and electrical sub-units without identification means; however, an identification means can be provided on either or both of the sub-units. The identification means can include different colors for the sub-units, one or more extruded or inked-on stripes 13 (Figure 2), or any other suitable identification means. Fan-out cables according to the present invention can include fiber optic cable components, for example, ripcords or water blocking yarns. The optical sub-unit can include a buffer tube with one or more optical fibers therein.

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

20. (amended) A composite cable unit, comprising:

an optical sub-unit, said optical sub-unit including a tube [generally] surrounding at least one optical fiber and strength members or filaments that are operative to at least partially de-couple said at least one optical fiber from said tube;

an electrical sub-unit; and

said optical and electrical sub-units being removably connected at a medial portion [generally] between said sub-units by a common jacket material.

28. (amended) A composite cable unit, comprising:

an optical sub-unit, said optical sub-unit including a tube [generally] surrounding at least one tight buffered optical fiber and strength members or filaments that are operative to at least partially de-couple said at least one optical fiber from said tube;

an electrical sub-unit; and

said optical and electrical sub-units being removably connected at a medial portion [generally] between said sub-units by a common jacket material.

35. (amended) A composite cable unit, comprising:

an optical sub-unit, said optical sub-unit including a tube [generally] surrounding at least one optical fiber and strength members or filaments that are operative to at least partially de-couple said at least one optical fiber from said tube;

an electrical sub-unit, said electrical sub-unit being a portion of a coaxial cable; and

said optical and electrical sub-units being removably connected at a medial portion [generally] between said sub-units by a common jacket material.